



presents:

# "PHYSICS AS METAPHOR"

NASA physicist Adolph Smith: "Dissipative Structures, or Swimming Against the Entropy Tide".

Sculptor Julianne Frizzell relates her impermanent sculptures to the modern physicists' view of matter (Is it 'there'? In what sense?).

Fiber artist and cartoonist Gertrude "Myrrh" Reagan discusses complementarity (How can something be opposite things at once) with the aid of her works.

Slides: Richard Feynman paintings relating to energy and radiation.

Also Happening:

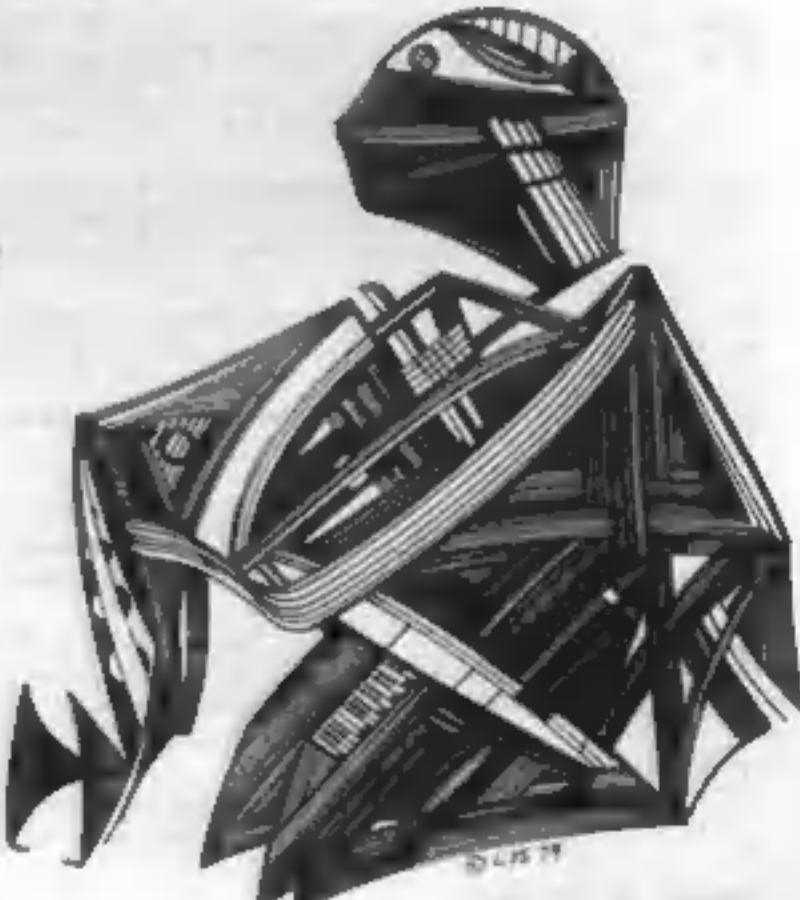
Display of science-related art by members and attendees. Bring some!

SATURDAY,

September 19<sup>th</sup> 1981  
2-5 PM

Fort Mason C-370  
Laguna & Marina  
SAN FRANCISCO

FREE



"The Great Think Tank" by Justin Shomaker.



## ARTISTS USING SCIENCE & TECHNOLOGY

### SEPTEMBER 1981 - CALENDAR

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Newsletter info. & art  
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660 Market  
San Francisco 94104

**Ylem** (I-lem): the primordial stuff out of which the universe emerged. (fr. Greek, matter).

SEPT. 19 - Ylem Bi-monthly Meeting, "Physics as Metaphor", Fort Mason C-370.  
SAT. 2-5 Laguna & Marina, San Francisco. Bring art to share, and books for Perpetual BookSale. (This is a painless fundraiser: bring art or science books & magazines you no longer need. Mark with modest prices. Sales receipts to benefit Ylem.)

SEPT. 30 - Scott Kim's Booksigning Party for Inversions, reviewed in the Games & column of the Scientific American. A knack for puzzles, letterforms, & computing enables Scott to make letters & indescribable shenanigans. Printer's Inc., 310 California Ave., Palo Alto.

OCT. 10-11 - The Graphics Gathering, "Interactive Media", (tentative), Palo Alto Cultural Centre, 1313 Powell Rd., Palo Alto. Put on by computer graphics people and artists. For info call Robin Samuelson, (415) 493-1026.

OCT. 23 - Computer Music Dance Concert, Computer Graphics Demo., Reception for David Kroos show, Sunnyvale Arts Center, 550 E. Remington, Sunnyvale.

OCT. 27- DEC. 5 "Circuit Images", Serigraphs by David Kroos, Sunnyvale Art Center, 550 E. Remington, Sunnyvale.

NOV. 4 "Art, Science, & Technology", slide show by Ylem artists Steve Ziss, WED. 8 PM Marty Kahn, Gertrude "Myrrh" Reagan, and Linda Marsh. Sunnyvale Arts Center, 550 E. Remington, Sunnyvale.

OCT. 27 - "Trick or Treat for Space", at 8 Broadway, 435 Broadway, San Francisco. 8 PM Eric Burgess narrates a performance, "The Hitchhiker's Guide to the Solar System". A costume party follows. Dress as your favorite alien.

### ALSO OF INTEREST

L.A.S.E.R. (Laser Arts Society for Education and Research) gives classes, sponsors events using laser technology. PO Box 42083, San Francisco 94101.

### MEMBER IN THE NEWS

Eleanor Kent has a ~~recent~~ show of her copy art series, "Money Women" in Mexico City, Centro Universitario Cultural, Odontologia #35; OCT. 1-16.

### NOTES ON THE ARTISTS

#### "The Great Think Tank" - ~~name~~

Justin Shoemaker is ~~the~~ penname of Leonard Sapoznik, who lives in Pleasant Hill. He has been an incurable doodler since childhood. His drawings were first reproduced by copy machine for his kids to color. A printer friend suggested technical pens for greater precision, and he became ~~interested~~ with fine-line resolution. He broke the ~~the~~ lines-per-inch barrier (beyond which printers claim the eye cannot resolve differences) by fine pens and specially dilute inks. He emulsifies his ink with fluid used to clean printing presses. 600 lines per inch is possible, he found, and he is pushing the limit further.

Some of his drawings have been reproduced with metallic instead of white backgrounds. His printer cuts them by laser on black-coated metal plates used to make printing plates.

With the help of Carl Rosendahl, he hopes to animate the drawings on Carl's computer.

#### Arches, page 5

Marty Kahn is a graduate in mathematics and linguistics. He has been working as a software engineer for Northstar Computers, San Leandro, for two-and-a-half years. His first attempt at art was at the request of his employers, to see what the computer could do. Its capabilities and his flair for it were a surprise and delight to himself as well as others.

The designs have been published as a computer coloring book, and he is now blowing them up by Xerox and making them into paintings. He lives in Berkeley.

#### Network - page 8

Brian Cameron, who ~~was~~ born in North Carolina, now lives in Palo Alto. He has had engineering training, ~~now~~ studies lithography, and programs his home computer. His computer not only generates line patterns such as this one, but can also be hooked up to a motor-driven cutter. The cutter is programmed to go in and out, cutting on a 2-foot-high rotating block of wax, and as it moves down, it cuts wax sculptures. Some of the forms are generated from mathematical functions, and are variations on corkscrew shapes. He is looking for an inexpensive way to mass them.

### RECEIVE FUTURE NEWSLETTERS - BECOME A MEMBER!

\$5 per year - make checks payable to Vlam. Send to Gertrude Reagan,  
1817 Moreno, Palo Alto, CA 94303

NAME \_\_\_\_\_

SPECIALTY \_\_\_\_\_

ADDRESS \_\_\_\_\_

INTERESTS, NEEDS, OFFERINGS:

CITY \_\_\_\_\_

## INFORMAL DISCUSSION NOTES - SEC. 15 YIEM ORGANIZATIONS MEETING

11/11/86 00-2128

### FUNCTIONS OF YIEM

#### Idea exchange:

- informal meetings
  - general meetings
  - in-depth lectures
- list project operators → - mailing list improvement  
- Network with other orgs.

includes tours (lab, indus.)

continuous bi-monthly info., alternate location

Reg. meeting place in SF.

improve publicity

for interchange of ideas of artwork

need time to mingle

by talking each other

#### Access to resources:

- Cleaver Kart has color  
Years machine to share.
- Several leads on equipment  
graphics firms with the  
writers, artists  
to their tools.
- YIEM library? - need books, home to house it (diff. area  
home in year).
- Industry tools

#### Bring Public:

- display of members' works
- performances
- tie-in with schools, museums

lots of enthusiasm  
bring young hearts  
communicate them

### FLAVOR OF YIEM

In newsletter,  
at meetings.  
(Needs: thematic  
to express artist  
for newsletter).

- More info. about fellow-artists!
- Keep emphasis on artist & art  
rather than tech. & sci. per se.
- Educate the public on YIEM art's  
weaknesses or balanced commentary.  
YIEM artists don't ignore the  
subject. flavor of the entire culture  
but reveal its positive implications.

share & relate  
responsibility  
for trans.,  
program, show  
org., publicity, etc.

or membership Committee  
especially  
pass the hat (meeting  
expenses, dues,  
expenses tour.)

- Keep small enough to be friendly,  
organized enough to be self-sustaining  
financially modest but stable.

Low-key fund-raising  
(not "survival funds",  
start with the members).

### REPLIES TO QUESTIONNAIRES...SO F-R

- Most prefer small but well-organized group.
- Rely on memberships, easy fundraisers. Fractal T-shirt to sell suggested.
- Interest group suggestions: photography (1), video (2), Computer graphics (4),  
communications (1), sculpture (1), logic & thought processes (1).
- General suggestions:
  - a) interactive newsletter of artists list specific needs;
  - b) include form to return when collecting ideas.
  - brunches, picnics together

## READABLE BOOKS - PHYSICS

Disturbu

Disturbing the Universe, Freeman Dyson

More than Knowledge, Dyson's Quest is affectionate wisdom. His personality sketches of Oppenheimer, Teller, Feynman, and others he has known are leavened with observations about similar men he has encountered in literature. This, and his perceptive autobiographical notes, make this a most unusual, human book to come from a scientist. Later chapters in the book look to the future: self-replicating machines, ending the arms race, cheaper space travel.

How We Know - Martin and Inga Goldstein, (Plenum Press, 14.95)

The authors use case histories (i.e., "Is Heat a Substance?") to show the scientific process at work. Surprise: It is ~~not~~ that different from art problem-solving. Also, they discuss what constitutes scientific proof. The goal of the book is to convey not only the practical values of science, but the esthetic and emotional rewards of doing scientific work.

The Dancing Wu Li Masters - Gary Zukav, (Morrow, \$9.95)

Zukav is a writer who has a knack for explaining the weirdnesses of Quantum physics and relativity theory without mathematics. Werner (Uncertainty Principle) Heisenberg once said that our knowledge is but a frail bridge ~~upon~~ a chess. Zukav shows why.

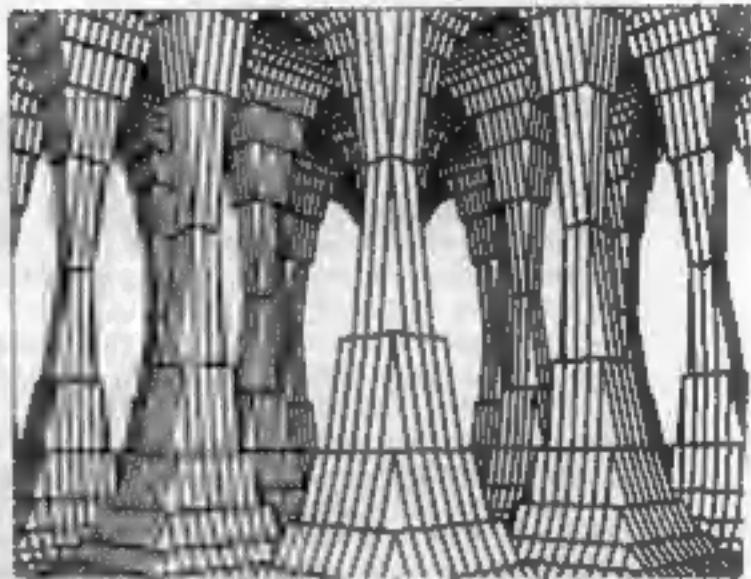
The Tao of Physics - Fritjof Capra (Bantam paperback)

Most physicists realized that they were travelling away from the traditional ideas of time, space, and matter, and had discovered limitations to their ability to know The World. Few realized that they were travelling toward an Eastern world-view where change, Indeterminacy, and unity of ourselves with our matrix (the universe), were deeply felt. For some, this 1975 book was fresh air; for others who went to see Western science as a four-square, solid edifice, it was an icy blast. The chapters on Eastern thought sparkle with clarity. Those in Physics were written for the non-mathematical reader, but ~~not~~ background which the Wu Li Masters does not. Try Wu Li first.

Watch for The Turning Point, (Simon & Schuster, 14.95), Capra's book due out in January. The four-square edifice idea ~~was~~ persisted our culture and given rise to huge social structures (multi-national corporations). The new world-view will lead us to soft technology ~~and~~ decentralization.

The current view is that no visual model of what physicists know is longer possible. Nevertheless, artist-sculptor Kenneth Snelson's Portrait of an Atom makes an unconventional attempt. The handsome booklet about his resulting sculpture, available from the artist at 140 Sullivan St., N.Y., N.Y. 10012 for \$2, has a lot of good background about the atom and its exploration.

the history of



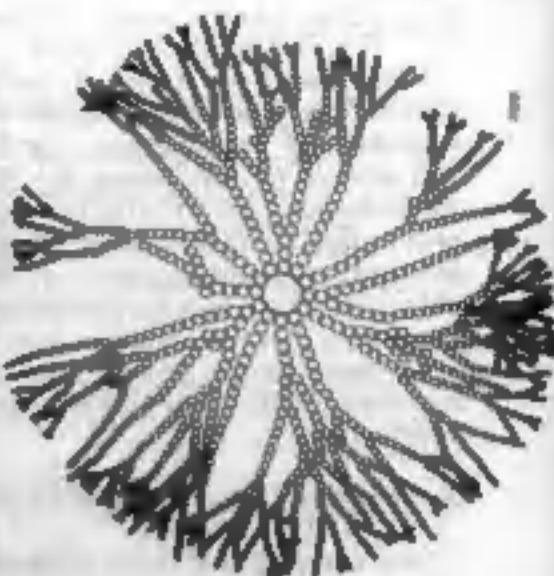
© Martin Kahn 15

These books, and the best Yivo art have one thing in common, something in common: they give us perspective.

INVERSELY, IS THE SQUARE OF THEIR DISTANCE  
APART

It is impossible to see anything  
in this dark; but I know this is me, Rexroth,  
Plunging through the night on a chilling planet.  
It is warm and busy in this vegetable  
Darkness where invisible deer feed quietly.  
The sky is warm and heavy, even the trees  
Over my head cannot be distinguished,  
But I know they are knobcone pines, that their cones  
Endure unopened on the branches, at last  
To grow imbedded in the wood, waiting for fire  
To burn them and reseed the burned forest.  
And I am waiting, alone, in the mountains,  
In the forest, in the darkness, and the world  
Falls swiftly on its measured ellipse.

From Collected Shorter Poems of  
Kenneth Rexroth.



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